

REMARKS

Claims 1-13 and 17-22 are pending. Claims 1, 3, 5, 8, 11, and 17 have been amended for clarity and consistency.

1. Rejection under 35 U.S.C. § 103(a) based on Spivey et al. and Spartiotis et al.:

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,886,353 to Spivey et al. in view of U.S. application publication no. 2002/0000549 to Spartiotis et al. This rejection is traversed.

Claim 8 recites a method of operating a large format image sensor. The method includes "first obtaining an image sensor chip which has first and second edges and an image sensor array of imaging pixels that comes within two pixel pitches of said first and second edges, and includes a control portion with row selecting logic in place of a plurality of central pixels of the image sensor array." The method also includes "abutting said image sensor chip against a similar image sensor chip of corresponding construction," and "interpolating missing pixels on chip, the missing pixels being caused by both said row select logic and by spaces between said image sensor chips."

The reference to Spivey et al. discloses operating a large format image sensor made up of readout circuit arrays 190 having a pixel array 183 adjacent first and second orthogonal edges of a substrate 189, and a row select shift register 186 adjacent a third edge parallel to the first. The Spivey et al. reference does not disclose or suggest operating a large format image sensor having a "control portion with row selecting logic in place of a plurality of central pixels of the image sensor array." The reference to Spivey et al. also does not teach on-chip interpolation, as the Examiner admits on page 8 of the Office action. The reference to Spivey et al. does not anticipate or render obvious the present invention as recited in claim 8.

The reference to Spartiotis et al. does not cure the deficiencies of Spivey et al. The Spartiotis et al. reference has been cited as showing modern cutting techniques for diamond saws having a precision of 10-20 microns. The reference to Spartiotis et al. does not suggest how Spivey et al. could be modified to produce a method of operating a large format image sensor that includes a "control portion with row selecting logic in place of a plurality of central pixels of the image sensor array." Spartiotis et al. also fails to teach or suggest modifications to Spivey et al. to deliver on-chip interpolation. Claim 8 is submitted as patentable over the proposed combination of the Spivey et al. and Spartiotis et al. references.

2. Rejections under 35 U.S.C. § 103(a) based on Spivey et al. and Heller et al.:

Claims 1, 2, 5-13, and 17-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Spivey et al. in view of U.S. Pat. No. 6,396,539 to Heller et al. The rejection of these claims is traversed.

The reference to Heller et al. is based on U.S. patent application no. 09/032,750 filed Feb. 27, 1998. The present application claims priority to U.S. provisional application 60/069,700 filed December 17, 1997. The Heller et al. reference is not prior art to the present application. Withdrawal of the rejection of claims 1, 2, 5-13, and 17-22 based on Spivey et al. and Heller et al. is solicited.

3. Rejections under 35 U.S.C. § 103(a) based on Spivey et al., Heller et al., and Spartiotis et al.:

Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Spivey et al. in view of Heller et al. and further in view of Spartiotis et al. The rejection of claims 3 and 4 is traversed.

The reference to Heller et al. is based on U.S. patent application no. 09/032,750 filed Feb. 27, 1998. The present application claims priority to U.S.

provisional application 60/069,700 filed December 17, 1997. The Heller et al. reference is not prior art to the present application. Withdrawal of the rejection of claims 3 and 4 based on Spivey et al., Heller et al., and Spartiotis et al. is solicited.

4. Rejections under 35 U.S.C. § 103(a) based on Schick et al. and Spivey et al.:

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,834,782 to Schick et al. in view of Spivey et al. This rejection is traversed.

Claim 8 recites a method of operating a large format image sensor by “first obtaining an image sensor chip which has first and second edges and an image sensor array of imaging pixels that comes within two pixel pitches of said first and second edges, and includes a control portion with row selecting logic in place of a plurality of central pixels of the image sensor array.” The method includes “abutting said image sensor chip against a similar image sensor chip of corresponding construction,” and “interpolating missing pixels on chip, the missing pixels being caused by both said row select logic and by spaces between said image sensor chips.”

Schick et al. discloses a method of operating a large-format image sensor. Schick et al. does not teach or suggest “interpolating missing pixels on chip, the missing pixels being caused by both said row select logic and by spaces between said image sensor chips,” as the Examiner admits on page 7 of the Office Action.

Spivey et al. does not cure the deficiencies of Schick et al. Spivey et al. does not disclose “interpolating missing pixels on chip, the missing pixels being caused by both said row select logic and by spaces between said image sensor chips,” as the Examiner admits on page 8 of the Office Action. Claim 8 is submitted as patentable over the proposed combination of Schick et al. and Spivey et al. since neither reference teaches or suggests the subject matter of claim 8.

5. Rejections under 35 U.S.C. § 103(a) based on Schick et al., Spivey et al., and Heller et al.:

Claims 1-7, 9-13, and 17-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schick et al. in view of Spivey et al. and further in view of Heller et al. This rejection is traversed.

The reference to Heller et al. is based on application no. 09/032,750 filed Feb. 27, 1998. The present application claims priority to U.S. provisional application 60/069,700 filed December 17, 1997. The Heller et al. reference is not prior art to the present application. Withdrawal is solicited for the rejection of claims 1-7, 9-13, and 17-22 under 35 U.S.C. § 103(a) based on Schick et al., Spivey et al., and Heller et al.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

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